Missouri Botanical Garden
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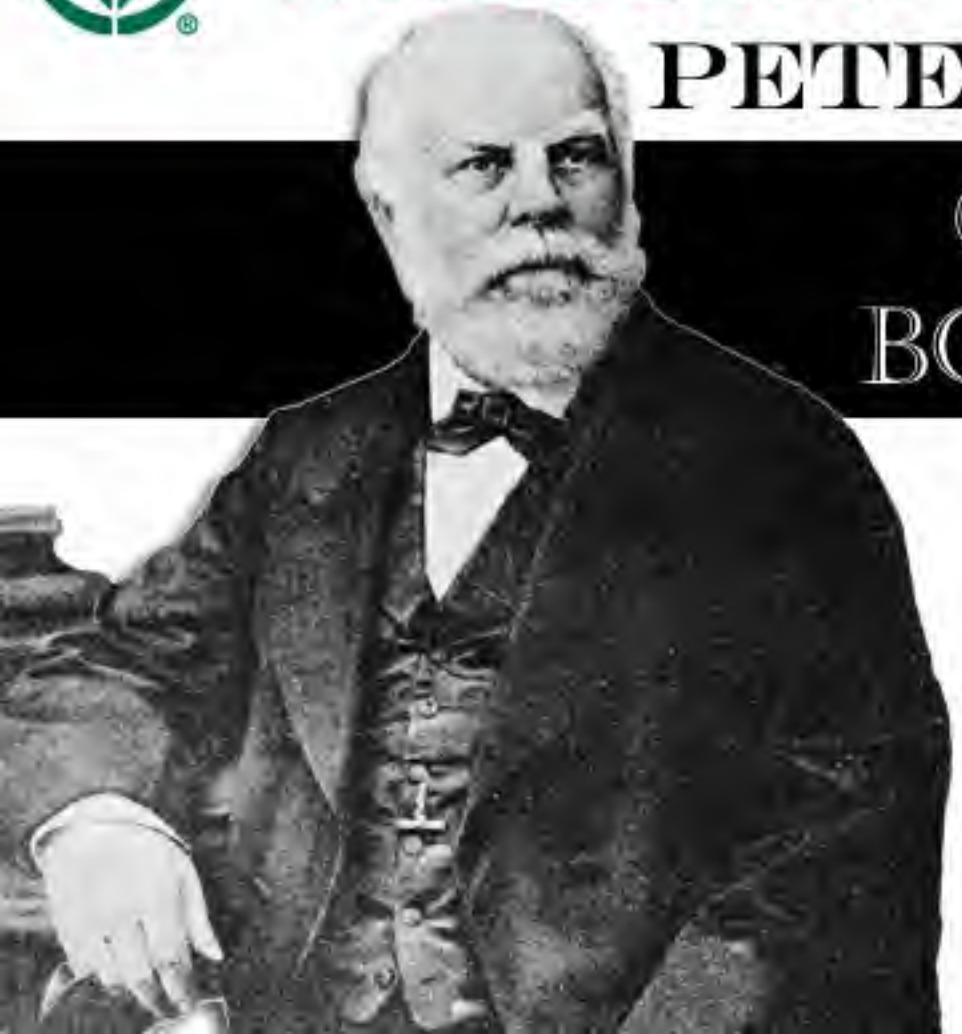
George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

969-984

Pinus Arizonensis
A. Gray

0 1 2 3 4 5 6 7 8 9 10
cm
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MISSOURI BOTANICAL GARDEN

Pastinaca sativa L.
" opaca Bernh. Hort.

Spr. I, 913
Rt, 196

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Europ.

Fr. 1820

Ch811

Sargent port — with color
C. alba with narrow leaves & glaucous below

1,000 mm = 0,039,370
1 — 0.039 inch

0.039
0.039
351
117

0,001521 000079319
039
13689
6563

1 cub mm
= 0,000079 cub inch

Allenton, May 79 / 1000000 / 0
100000 / 8 1 / 12500

My dear Friend

I send you this morning my first mass of green stuff for this season. It consists chiefly of Oaks and Hickories. When there are several of the same name, they are from different trees. Some of the oaks are rather old, for it is impossible to collect them all in good condition at the same time. Some of the hickories are not yet ready ~~either~~, porcina on low grounds is behind that of the hills. The Orchid I have not seen either here or elsewhere before. Of the two Viburnums, lentago or the one so marked, which occurs chiefly on low grounds, is few days in advance of prunifolium, which I find generally on the exposed rocky glades about here. The latter is now in full bloom, while I could find but one of the former yet with flowers, although it is very common.

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Arrangement of Pines May 1879 11843

Ductus peripherici

Inflor. fem. subterm. inclin

Strobus and allies 5
~~Cembra~~
flexilis 5 2 sp.
pygmaea 5
Cembroides 5 4 sp.
Pinea 3
~~Balfour~~ & ant 5.

parenchymatosi

Cembra 5
Mandshurica 5
Montezumae (3-)5
+ ell. Standish
Strobus 5
leiophylla 5
ponderosa 3
(muricata 2) dam
Chihuahua 3.
contorta 2
glabra 2
Lambertiana 2
(Pinaster 2).
Torreyana 5
(Tuberculata - Andr.)
Greggii 2.

interni

australis 3
Cubensis 2-3
occidentalis 5
(coccarpa & ell.) 5

sylvestris 2
montana 2
resinosa 2
Densiflora 2

Inflor. fem. laterales

Bungeana 3
Halepensis 2
× Brutia

Pabuleana 3
Coulteri
Sabiniana
Jeffreyi 3
Ponderosa 3
Lambertiana 3
macrocarpa 2
rigida 3
Greggii 3 ?
Muricata 3
patula 3
Ayacahuite 2
Pungens 2
Banksiana 2
mitis 2-3
(contorta 2)
Pinaster 2.

Echinata 2-3
(Cubensis)

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May 1879.

Strobus
Pinaster

Subterminales

Ductus peripheriri — 1–5 leaves

4. Cembroides
5 Aristatae
6 Ponderosae

Ductus parenchymatosi interni — 5 leaves

11 Pseudostrobus
12 Ponderosae
13 Chihuahuae
~~14 Australes~~

2–5 leaves

19 Australes

7. Sylvestres — 2 leaves
8 Pineae — 14 Lariciones
15 Contortae

Laterales

9 Bungeanae — 2–3 leaves
16 Taeda
17 Rigidae
~~18 Elliottiae~~

20 Elliottiae

2 leaves

10 Mediterraneae — 18 Pungentes

Cane

Canariensis any 12 Ponderosae
Pinaster any 18 pungentes

I can rather out of place

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11844

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THE AMERICAN NATURALIST.

A Popular Illustrated Magazine of Natural History and Travel.

Letters on business connected with THE AMERICAN NATURALIST should be addressed to the Publishers, MCCALLA & STAVELY, 237-9 Dock Street, Philadelphia, Pa.

Terms of NATURALIST, $4.00 a year.

PHILADELPHIA, ... 187

DEAR SIR:

We have the pleasure to announce that we have become the publishers of the AMERICAN NATURALIST.

We hope we shall have your encouragement in our undertaking, not only by a prompt remittance of your own subscription, but by your personal influence in extending the usefulness and circulation of such a periodical.

The writers for the AMERICAN NATURALIST *for* 1878 *will be found in the January number, which is mailed to-day. No other periodical presents such a list of distinguished scientists, and, as it has been in the past the medium of communication between the biologists and geologists of the country, it appeals especially to your interest and attention. It shall be the aim of the publishers to do their part in presenting the* AMERICAN NATURALIST *in such shape as shall merit the support of the scholar and student.*

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Anatomy of Conifer – Leaves for diagnostic purposes
and Classification

1865 F. Thomas in Botan. Zeit. IV. p. 23 et
-63

1871 C. C. Bertrand in Bullet. Soc. Bot. France 18. 376-
381

1874 the same in Ann. Sc. nat. Bot 20 p. 5-153
with 12 plates

1875 W. R Mc Nab Proc. R. Irish Ac. 2. 209-213

1877 the same " " " 673-704
1 plate

Prof E Parkinje the Forsters Academy of 4 plates
of Weiss wasser, Austria

Remember when you are in want of any PERFUMERY, FINE BAY RUM, ENGLISH AND FRENCH BRUSHES, CUT GLASS BOTTLES, WRITING PAPER, VISITING CARDS, SOAPS, COLOGNES, EXTRACTS in bulk for the Handkerchief, SPONGES, ODOR CASES, or any Toilet Article, you can find a Complete Stock at C. K. JONES & Co., 2800 Washington Avenue. Also remember when compelled to buy any MEDICINES, that they keep a full and fresh stock, which are dispensed by experienced Pharmacists.

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5h811
1184s

May 1879

Pines

Ducts without hypodermis

Ducts surrounded by hypodermis only

1 Strobus all except Lambertiana
2 Flexilis
3 Cembra

4 Cembroides
5 Aristata
- Coulteri
& Jeffreyi

6 Sabiniana except

7 Sylvestres

8 Burgeana

- except Halepensis

9 Mediterranea

10 Pinaster Pinea

11 Radiata

12 Muricata

~~13 Insignis~~ except Coulteri Torreyana

13 Insignis
Coulteri Torreyana

14 Pinea

15 Taeda except Coulteri

16 Virginiana except Canariensis

17 Australis

18 Clausa

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11846

University Club.

Lieber Valer

Ich wende
Sha[illegible] Kommen da
ich mit Peter
in eine Vorlesung
zu der Washington
University gehe
wo ich auch
[illegible]

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Pinea

Amer. IIII
Asia IIII
Europ II

Pinus

East Am. IIII IIII I — 11
West Am. IIII IIII IIII IIII — 17
Mex. IIII IIII IIII — 15
43
Asia & isls. IIII IIII IIII — 13
Europe IIII IIII — 11
24

old world
new

Am. 2 11
w 17
Mex 15

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11847

San Diego Cal.
Aug 5/79

Mr Sereno Watson
Dear Sir

When was Bot 2 But 1
Cal
or ont?

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May 1879

Pinus

all with subterm ✝

I **Strobus** a. parish. duct

1 Eustrobus × wing'd seeds

2 Flexiles ✝✝ almost wingless seeds

3 Cembra β. parenchym duct

II **Pinaster**

a Peripheral duct

× subterminal cones

✝ entire leaves

+ large, almost wingless seeds

1–5 leaves 4 **Cembroides**

+ + smaller, large winged seeds 5 leaves

5 **Aristatae**

✝✝ serrulate leaves

+ 3. leaves Khasia insulis, Longifolia

6 **Indicae**

Gerardiana 7.

+ + 2 leaves Mediterraneae

Halepensis Brutia

+ + + 2 leaves P. Sylvestris

reclinata Sylvestris recurvata Densiflora

8 Pinea Pinea

✝✝ Caterva 3 leaves 9 Chinenses Bungeana

2 leaves 10 Mediterraneae

Halepensis (Austriaca) Pyrenaica

?. nankinensis Thunbergii

No Ducts no leaves seen

b. Parenchymatous duct

× subterminal cones

✝ 5 leaves 11 Pseudostrobus Lindleyi

with hypoderm. duct Pseudostrobus

tenuifolia filifolia Montezumae

Torreyana Hartwegiana

✝✝ 5–2 leaves with hypod. duct 12 Ponderosae

Engelmanni ponderosa Canariensis

✝✝✝ 3 leaves, with hyp. or duct, dorsally thickened

✝✝✝✝ 2 leaves 13 Canariensis Canariensis Monticolae

14 Laricio Laricio with hypod. duct,

15 Corsicana without hyp. Monticolae

Thunbergii

✝✝ Caterva cones

✝ 3 leaves 16 Taeda Sabin. Coulteri insig.

triquetrous Cubic wings Greggii Teocote

✝✝ 2 (or 3) Leaves 17 muricata subsp. radiata

Banksiana muricata globosa

16. ✝ ✝ 18 Pungentes with hypod.

insps pungens occidentalis or duct Sin.

with hyp. Canar. Pinaster

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11848

St Louis 16 May
1879

Herrn Jam Deeles,

Heben Sie und Ihr Jam Bolen
mit mehr dul: Empfangen mein
und Ramsbay Morgenlied die Ihnen
und Ihnen Ihnen bei mit
unsern !
Ihr und grüß
Lieben mit
Ihnen Ihnen Ihnen

Ihr Dr G. Engelmann

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Pinus Japonica ex Chambers
ex Herb Leyden.

Pinus Massoniana Lamb Hongkong, Perfetti sub nom Massoniana
Lichten (Meyen) in Hb. Berolin. — — Massoniana
Hongkong in Hb Kew Pinus
Chine, Standish in Hb. Vindob.
Nippon Perfetti in Herb Florent in (densiflora??)
Schroda Wilson

Pinus Thunbergii Parlat Nangasaki Oldham. Hb Vindb.
" " No 561
Yokahama, Maximowicz Hb Comm.
Japan, Perfetti in Hb. Florence x
Japan Albrecht Hb Petersb No 2 Massoniana
~~Dropmore cult~~
Hooper Hort cult. densiflora
Japan ex Hb. Leyden in Hb. Wien. densiflora

Pinus densiflora Hb Thunb Japan Oldham
" " Maximowicz Hb Comm.
Nippon Perfetti (supposed to be Massoniana)
Siboda Wilson
Japan Albrecht No 1 in Hb. Petersb. Massoniana
Hort Sargent 1879 Massoniana
Hort Hunnewell 1876 Massoniana
Hort Kew ~~densiflora~~ Massoniana

P. Lambii ? Thunbergii ? Dropmore Park densiflora

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11849

25
5-6
81

28
11
3
47
21
32

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Missouri Bot. Garden looks like dense flow with very narrow leaves!
= Sargent

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Early con of sheaths of leaf

P. Burgeana

P. ~~Kikesia~~ Gerardiana } closely allied

Nut pines

Chichuchuan

11850

Missouri Botanical Garden
George Engelmann Papers

Carr. l.c 260

Picea Sitchensis E. Pinus S. Borg. Lith. 46 Abies Menz. Hf.

Pinus Menziesii Dougl. Mss. ap. Lamb. Pin. Nutt. Sy. 3. 131

Abies Menziesii Lond. ab 2021 1852

Parlatore l.c. p. 56

Spach Hist. Vég. phan. II. 369 seq. 1834

Pinus

1. Eupitys 2 leaves
2 Taeda 3 leaves
3 Strobus 5 leaves
4 Cembra large closed wingless seeds

Link, Linnaea XV (1841)

1 Folia gemina p. 484
2 Folia bina Ternaque p. 502
3 T. terna p. "
4 — terna quaternaque 509
5 — quina 512

Endlicher Synopsis Conif 1847

A. Sapineae p. 79
B Pineae p. 132
6. Cembra 137 Semen apterum!
7 Strobus 145
8 Pseudostrobus 151
9 Taeda 157
10 Pinaster 166
11 Pinea 182 "Semen apterum"!
(incl. Cembroides & Tsugoideae

Parlatore in DC Prod XVI.2 p. 378 1868

Subgen Pinus

I Pinea apophys. pyramidata II. Cembra apophys. dimidiata
A Pinaster 2 foliat
B Taeda 3 —
C Pseudostrobus 5 —
~~II Cembra~~ apophys. dimidiata p. 602

over

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Dr Geo. Engelmann,

St. Louis, Mo.

Dear Sir:- Please identify the enclosed Cuscuta.

Yours truly,

J. J. Davis

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15811

x Geographical distribution of
Conifers

Goeppert in "Deutsche Garten"

see Necrologue of Elias Fries

from Garden Chronicle March 1878

reverse side

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4

ovate, 2-toothed, subsessile, partly enclosed (when it represents A. cryptopodum Engln. olim); pedicel at last elongated, erect and recurved (A campylopodum Engln. olim); berry compressed, fleshy, dehiscent at the circumscissile base; cotyledons (indicated by a notch, very short, only); — Glabrous jointed shrubby parasites of conifers, of greenish or brownish colour, with angular branches and scale-like leaves, the pairs connate into sheathing cups; flowers single, or several from the same axil, often crowded into apparent spikes or panicles, opening (in ours) in summer or autumn; berries maturing in the second autumn, when they suddenly and forcibly eject the glutinous seeds to the distance of several yards, where they fasten on leaves or branches.

× Staminate flowers all or almost all terminal (buds globose) on distinct, pedunle-like, joints, paniculate

A. Americanum, Nutt. Slender, dichotomously or verticillately

SMITHSONIAN INSTITUTION,

WASHINGTON, December 24, 1860

Dr G. Engelmann, St. Louis, Mo

SIR:

We have this day sent to your address, by the St Louis Acad. of Science ~~Adams Express~~ Co., a parcel containing the following packages; the receipt of which you will please acknowledge by dating and signing this blank, and returning the same (postage prepaid) to the Smithsonian Institution.

You will confer a favor by delivering to their respective addresses any packages which may be enclosed to other parties.

Very respectfully, your obedient servant,

JOSEPH HENRY,
Secretary S. I.

Current Number.	No. of Packages.	Address.	Received from.
19407	1	Address as above	A. de Candolle

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11853

Pinus

Cones deciduous (apical?)

P. ponderosa
P. Laubertiana

Cones persistent: (close?)

3–5 years

P. Sabiniana
P. Coulteri

12–20 years

P. jeffreyi
P. tuberculata
P. muricata
P. contorta.

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Coma densa ponderosa Lambertiana

Coma persistent 3-5 yrs Sabiniana Coulteri

Coma persistent 12-20 insigne Jeffreyi
& more yrs insignis contorta

Bolander

11854

W. M. Williams, Bus. Man.

Cairo Printin

BOOK

JOB PRI

Front Rooms Up Stairs.

MISSOURI BOTANICAL GARDEN
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Sir

I now have the
Close your proof
Cover, Will Ens
the balance a

Pines with entire leaves.

P. aristata
P. flexilis
P. edulis — & all rest pines

Jussieu = his descr. of Cembra
Nov. pl. I. p. ... already mentions
the entire leaves — overlooked
by his successors.

Doctor

St Louis Jan 30th 1861

Mr

to Dr Engelmann

to visit to child in Consultation with

Dr Washington $3.00

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55811

Oct. 14 1870.

One of the Sections of Pinus ought to be formed by those with long leaves, which are produced on thick branchlets, and are deciduous usually after the 2d year, so that only the end of the thick branchlets is bearing a bunch of the long leaves, the lower part is naked and the whole ~~tree~~ resembles a broom-
cones spiral and deciduous usually large, leaves usually thick and stiff, but perhaps some of the Mexican leaved Mexicans may also be long here. Leaves often 5, but from 2 or 3 to 5.

Representatives: Southeast are P. australis, ? Mexico P. Montezumae and allies, ? P. Hartwegii, P. ponderosa, in California P. Torreyi, P. Coulteri (which is thus separated from P. Sabiniana) Perhaps P. occidentalis & P. cubensis both with small cones also belong here ?

Stopanise ? Mexican ? S. Beechy also Lac

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Pinus

Fem. annuli subterminal

P. sylvestris
Austriaca
Pumilio
uncinata
glabra (always?)
contorta (always?)
ponderosa
resinosa
Chihuahuana
Montezumae
arizonica

Strobus

Cembra
flexilis
~~cembroides~~
~~edulis~~
~~monophyllos~~

Fem. annuli lateral

3 P. rigida
4 serotina
2 Taeda
5 inops
6 Banksiana
1 patula
contorta (sometimes?)

~~Chihuahuana~~ ?

mitis

Cembra
edulis
monophylla
(Tanyana)?

Halepensis ?

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Saint Louis, October 23 d 186 2

Mr. Doct. Engelman

Sir: *You are hereby notified and required to remove* **NUISANCE** *from your*

premises on Seventh between Lafin & near Gratiot

in Block No. 149 *consisting* of Stagnant water

within five *days from the service of this notice, and in case you shall fail to comply with this order, it is made my duty to report you to the proper officers.*

Respectfully,

Urban H. Koenig

STREET INSPECTOR 3 & 4 22 WARD.

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11857

Persistent male anents — or with
old anents adhering to axis for
several years observed in

P. sinuosa state

P. Banksiana

P. ~~Contorta~~ ?

P. Rumilio

FORM B.

F RATIONS ISSUED TO RECRUITS

----------, under command of ----------,

---------- by ----------, Special Contractor.

OMMENCING.	ENDING.	No. of days drawn for.	No. of complete rations.	REMARKS.

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11878

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Phyllotactic arrangement of Cones

			arrangt	prominent rows
P. excelsa Z.St.Pa. 3 cones 1864			8/13	3 & 5
P. Strobus				
Tsuga Williamsonii 3. cones from Califor			8/13	3 & 5
Pinus muricata N.	N. 2803 Calif. Brewer	1	13/21	5 & 8
" "	"	1	11/18	4 & 7
P. contorta, very large Cone, Califor	N. 1479 Brew		21/34	8.13
5 very small cones from the Sierras	Brewer		13/21	8.13 ÷ som 5 & 8
P. tuberculata ?? ex Cabel rusigni ?	Brewer Californ		21/34	8.13
P. Benthamiana, Oregon	Brewer 1 cone		21/34	8.13.
"P. Edgariana" (cone Clinchspur)	Brewer, Californ		13/21	5. 8.
Pinea Mexicana"	Oregon, Brewer 2 small cones		13/21	8.13
"Pinus retrofracta"	Oregon, Brewer 1 cone		13/21	8.13
Sequoia gigantea 5 cones,	Brewer		8/13	3. 5
S. sempervirens				
P. Sabini 3 cones as above	Orlando Calif.		8/13	5
P. pungens	Pennsylvan, Durand. 1		21/34	8.13
P. albicaulis	Californ, Brewer, 2 cones		13/21	5 & 8

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Shoshili

Pinus Douglasii	2 cones	from 10,000'	Wind River Mts, small, Hayden.	8/13	3.5
———	3 larger Cones;	Hayden, Bighorn Mountains		8/13	3.5
———	4 large & small	Snakefork 6500'		8/13	3.5
Pinus ponderosa	Laramie Mountains	Hayden.	Mark 1 cone	13/21	5.8
———	———	—	Snakefork 2 cones	21/34	8.13
P. aristata	Colorado, Parry 1862		1 cone	13/21	5.8
Picea Menziesii	Wind River Mts. Hayden		2 cones large	21/34	8.13
———	———		1 — small	13/21	8.13
———	Snake fork, Hayden.		2 large	13/21	8 13
Pinus contorta	Wind River Mts, Hayden.		3 small	13/21	5.8
———	Columbia River, Head ~~Snake fork~~		(Hind) 3 small cones	13/21	5.8
P. flexilis	Colorado, Parry 1862,		2 small cones	8/13	8.5
P. contorta	Laramie Mts, Hayden.		8 cones	13/21	5.8
P. ponderosa	Pole Creek, of the Platt.		very small cone	13/21	5.8
Picea Engelmanni	Head of Columbia, Hayden		2 cones	8/13	(8) 15 8
———	Laramie Mts & Wind River Mts.	Hayden	5 cones	8/13	5.8
Pinus Cembroides	Gr. Cuba	Wright 3190	old cone	13/21	5.8
		3189	2 cones	13/21	5.8
		1462	2	13/21	5.28
			1 smallest	8/13	5.8.
P. Coulteri	Boland. California.			21/34	8.13
P. Sabiniana	Wright (small cones			21/34	8.13
P. australis	(Curtis)		6 cones	13/21	5.8

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Phyllotactic arrangement of Cones.

P. Pinus Torreyana 1 sp. 18/29. 7 & 11 spirals most prominent
Parry 21/34 8 & 13

P. insignis (Parry) 1 sp. 11/18, 7 & 11 spirals most prominent

P. mucronata (Parry) 1 sp. 21/34. 8 & 13 spirals most prominent.

P. monophyllos 2 sp. all 8/13.
Salis 2
Banyana 2
Canbyi 3

P. ponderosa Parry 2 sp. 13/21
Austin 12 sp. 13/21

P. Banksiana Parry 2 sp. 13/21
Austin 12 sp. 13/21

P. Engelmanni Carrière (Wisc. sp.) 13/21

P. strobiformis (Wisc.) 8/13.

P. Chihuahuana (Wisc.) 13/21
Wright. 13/21 5 & 8

P. Lambertiana (H. Engl.) 34/55.

P. Sabiniana (Wisc.) 21/55
Bolander, Parry 2 sp 21/34 8 & 13
Plumstead, Parry 5 sp. 13/21 8 & 13

P. mitis Engl. Mayr. 6 sp. 13/21 5 & 8 spirals most prominent

P. rigida Sabine 6 sp. 21/34 5 & 8 — — —

P. Taeda Engl. Mayr. 7 sp. 21/34 5 & 8. — — — — —

P. Austriaca Hort Bot Mus. 6 sp 13/21 8. 13

P. serotina Hort Bot Mus 7 sp. 13/21 8. 13.

~~P. albicaulis? Calif Brewer 8/13 5 (& 8)~~

P. patula Engl. Mexico 13/21 8 (& 13)

P. Bolander No 2 (Heeger) 13/21 {8 & 13 lower tubercle pointed hor 21/34 short & long leaves

P. Bolander No 1 6 comp 21/34 8 & 13 on 5: 8

0 1 2 3 4 5 6 7 8 9 10 cm
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11860

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